## CERTIFIED CONCRETE TECHNICIAN TRAINING COURSE AGENDA

Title-Time	Subjects	Instructors	Reference
Monday Morning Moderator: Ron Walker			
<u>Introduction</u>			
10:00 to 10:15	Opening Comments Agenda/Manual Update Technician Requirements QC/QA Concepts	Ron Walker	
Math for Concrete			
10:15 to 10:45	Round-Off Rules Basic Math	Ron Walker	Chp 1
10:45 to 11:00	** BREAK **		
Materials for Concrete			
11:00 to 11:30	Cement	Tom Grisinger (Toby Knott)	Chp 2
11:30 to 12:00	Mineral Admixtures	Tom Grisinger (Toby Knott)	Chp 2
12:00 to 1:00	** LUNCH **		

**Monday Afternoon** Moderator: Ron Walker

## Materials for Concrete (continued)

1:00 to 1:30	Chemical Admixtures	Marvin Obermeyer (Mark MacKenzie)	Chp 2
1:30 to 2:15	Aggregates Steel Evaporative Retardants	Ron Walker Tony Zander	Chp 2
2:15 to 2:30	**BREAK**		
Mix Design of PCC			
2:30 to 3:15	Specification Requirements CMD Targets Material Availability INDOT Approval	Tony Zander	Chp 3
Proportioning			
3:15 to 4:00	Weight/Volume Relationship	Tony Zander	Chp 3

### **Tuesday Morning**

Moderator: Ron Walker

Homeworl	k Review
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8:00 Answers & Discussion Tony Zander to

8:15

#### **Linear Equation**

8:15 Unit Wt. vs. Air Content Tony Zander Chp 3 to for CMD

9:30

9:30 to 9:45 \*\*BREAK\*\*

#### **Linear Equation**

9:45 Unit Wt. vs. Air Content Tony Zander Chp 3

to at Max. Allowable W/(C+P+SF)

11:00 INDOT Approval

#### Field Testing Equipment

11:00 Unit Weight Gary Mithoefer Appendix C

to Air Content

12:00 Compressive Strength

Equipment Calibration

12:00 to 1:00 \*\*LUNCH\*\*

**Tuesday Afternoon** Moderator: Ron Walker

# **Testing Procedures**

1:00 to 2:30	Requirements AASHTO Exceptions Problem Areas	Gary Mithoefer	Appendix B
2:30 to 2:45	**BREAK**		
Trial Batch Demonstration			
2:45 to 3:30	Purpose Preparation Allowable Adjustments Case Studies	Tony Zander	Chp 4

## Wednesday Morning

Moderator: Ron Walker

#### **Homework Review**

8:00 Tony Zander

to 8:30

**Trial Batch Demonstration (continued)** 

8:30 Tony Zander Chp 4

to 9:45

9:45 to 10:00 \*\*BREAK\*\*

**Quality Control -- Field Operations** 

10:00 Plant Production Mark MacKenzie Chp 5

to Concrete Delivery

11:00

**Quality Control -- Field Operations** 

11:00 Pumping Procedures Gary Brown Chp 5

to (Nick Fletcher)

12:00

12:00 to 1:00 \*\*LUNCH\*\*

## Wednesday Afternoon

Moderator: Ron Walker

Quality	y Control	Field	<b>Operations</b>

1:00	Finishing and Curing	Tony Zander	Chp 5
to	Form and Falsework Removal		
1:30	Load Application		

#### Sublot and Lot Sizes

1:30	Terms and Definitions	Ron Walker	Chp 6
to			
1:45			

### Quality Control -- Minimum Specification Requirements

2:15 to 2:30 \*\*BREAK\*\*

1:45	General Scope	Ron Walker	Chp 7
to	Specification Requirements		
2:15	Quality Control Plans		

#### Quality Control (continued)

2:30	Producer Perspective	Norm Thoeming
to		
3.00		

## Quality Control (continued)

3:00	Contractor Perspective	Mike Kaelin
to		
3:30		

#### Quality Control (continued)

3:30	Consultant Perspective	Don MacDonell
to		(Jim Sherer)
4:00		

## Computer Demonstration

4:00	Tony Zander
to	Gary Mithoefer
4:15	

## Thursday

Moderator: Ron Walker

#### Lab Demonstration at INDOT Materials & Tests Division

8:00

to

11:30

12:00 to 1:00 \*\*LUNCH\*\*

#### Homework Review

1:00 Tony Zander

to

1:15

#### **Quality Assurance**

1:15	Random Sampling	Ron Walker	Chp 6

to Specification Requirements

2:30 Pay Factors

**Appeal Procedures** 

2:30 to 2:45 \*\*BREAK\*\*

## Failed Material Investigation

to INDOT Responsibility 3:30 Contractor Options

Case Studies

# Friday

Moderator: Ron Walker

8:00	Written Exam
to	
12:00	